

PATENT COOPERATION TREATY

Rec'd PCT/PTO 23 JUN 2004

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From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

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01. Juni 2004

WV: / LF:

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing
(day/month/year)

27.05.2004

Applicant's or agent's file reference
50876 WO

IMPORTANT NOTIFICATION

International application No.
PCT/IB 02/00556

International filing date (day/month/year)
26.02.2002

Priority date (day/month/year)
26.02.2002

Applicant
NOKIA CORPORATION et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international
preliminary examining authority:



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Rec'd PCT/PTO 2.3 JUN 2004

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10/505568

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 28 MAY 2004

WIPO PCT

Applicant's or agent's file reference 50876 WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/IB 02/00556	International filing date (day/month/year) 26.02.2002	Priority date (day/month/year) 26.02.2002
International Patent Classification (IPC) or both national classification and IPC H04Q7/38		
Applicant NOKIA CORPORATION et al.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of two sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 23.07.2003	Date of completion of this report 27.05.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tlx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Rabe, M Telephone No. +49 89 2399-8801 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/IB 02/00556**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17):*

Description, Pages

1-16 as originally filed

Claims, Numbers

1-15 received on 12.02.2004 with letter of 10.02.2004

Drawings, Sheets

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-15
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-15
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations

see separate sheet

Reference is made to the following documents:

D1: WO 02/05581 A1

D2: WO 01/35585 A1

A. Citations and explanations made in respect of paragraph V:

1. Document **D1** (see in particular abstract; page 1, lines 11 to 16; page 2, lines 4 to 12; page 3, line 24 to page 4, line 2; page 6, lines 5 to 35; page 9, line 14 to page 11, line 26; Figures 1 and 2) discloses, in accordance with the principle of **claim 1**, a method for operating a mobile terminal device (see eg. "111" in Figure 1) wherein said mobile terminal device can access at least one data connection (see in particular page 3, lines 24 to 29; see "Bluetooth", "GSM", "GPRS" and "UMTS" in Figure 1), the method comprising the steps of:

obtaining properties of at least one data connection accessible from said mobile terminal device (see in particular page 3, lines 27 to 29; page 6, lines 7 to 16; page 10, lines 3 to 13; page 11, lines 22 to 25); and

adapting the configuration of said terminal device in accordance with said properties (see in particular page 3, line 31 to page 4, line 6; page 6, lines 16 to 21; page 11, lines 16 to 19 and 25 to 26).

The subject-matter of **claim 1** differs from that disclosed in document **D1** merely in that the mobile terminal device **explicitly** includes an application and that the configuration of this application is adapted in accordance with the properties (in document **D1**: generally adaptation of the mobile terminal device).

However, this distinguishing feature is **implicitly** disclosed in document **D1**, as a mobile terminal device generally supports plural applications, such as short message service (SMS) and Internet access (GPRS), each having different characteristics; in accordance with document **D1**, the mobile terminal device and, implicitly, any supported application, is configured in accordance with the properties of an accessible connection (see in particular page 11, lines 22 to 26).

The skilled person, being aware of the method described in document **D1** and wishing to (explicitly) provide further technical details in respect of the mobile ter-

minal device, **would** therefore arrive, by explicitly including a design detail which is already implicitly disclosed in document **D1**, **without** the exercise of inventive skill, at the method for operating a mobile terminal device corresponding to the subject-matter of claim 1.

The subject-matter of independent claim 1 therefore does **not** involve an inventive step, Article 33 (3) PCT.

2. **Dependent claims 2 to 9** do **not** contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step for the reason that the subject-matter of said claims is **in principle** directly derivable from the disclosure of document **D1** (see in particular abstract; page 1, lines 11 to 16; page 2, lines 4 to 12; page 3, line 24 to page 4, line 2; page 6, lines 5 to 35; page 9, line 14 to page 11, line 26; Figures 1 and 2) or from a similar application described in document **D2** (see in particular abstract; page 4, line 25 to page 5, line 23; page 13, line 5 to page 15, line 20; Figure 1).

Dependent claims 2 to 9 therefore **do not** meet the requirements of Article 33 (3) PCT.

3. The same considerations as made in above paragraphs 1 and 2 relating to respective claims 1 and 2 to 9 are also valid for **independent claims 10 to 12** for the reason that said claims 10 to 12 merely relate to a software tool, a computer program and a computer program product, respectively, including means for carrying out the method of anyone of claims 1 to 9.

The subject-matter of independent claims 10 to 12 therefore **does not involve an inventive step**, Article 33 (3) PCT.

4. Furthermore, the same considerations as made in above paragraph 1 relating to the method of claim 1 are also valid for **independent claim 13** for the reason that said claim includes substantially the same feature combination as claim 1 in terms of a claim relating to a device (and including, in consequence, corresponding means).

The subject-matter of independent claim 13 therefore **does not involve an in-**

ventive step, Article 33 (3) PCT.

5. **Dependent claims 14 and 15** do not contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step for the reason that the subject-matter of said claims is **in principle** also directly derivable from the disclosure of document **D1** (see in particular abstract; page 1, lines 11 to 16; page 2, lines 4 to 12; page 3, line 24 to page 4, line 2; page 6, lines 5 to 35; page 9, line 14 to page 11, line 26; Figures 1 and 2).

Dependent claims 14 and 15 therefore **do not** meet the requirements of Article 33 (3) PCT.

6. The subject-matter of present claims 1 to 15 is considered to be **new**, Article 33 (2) PCT, and susceptible of **industrial application**, Article 33 (4) PCT.

B. Further remarks made in respect of the present application:

1. To meet the requirements of Rule 5.1 (a) (ii) PCT, the documents **D1** and **D2**, which represent a relevant state of the art with regard to the present invention, should have been identified in the opening part of the description and the relevant background art disclosed therein should have been briefly discussed.
2. The opening part of the description should have been **brought into conformity** with the wording of the amended independent claims, Rule 5.1 (a) (iii) PCT.

Claims

1. Method for operating a mobile terminal device having an application (50-56) and wherein said mobile terminal device can access at least one data connection (10, 12, 14, 16, 18), comprising the steps of:
 - obtaining properties (100) of at least one data connection (10, 12, 14, 16, 18) accessible from said mobile terminal device, characterized by
 - adapting (102) a configuration of said application (50-56) on said terminal device in accordance with said properties.
2. Method according to claim 1, wherein the only available property comprises the identification of said data connection (10, 12, 14, 16, 18).
3. Method according to claim 1 or 2, wherein said properties are obtained (100) when a specific data connection (10, 12, 14, 16, 18) is selected.
4. Method according to anyone of the claims 1 to 3, wherein said at least one accessible data connection (10, 12, 14, 16, 18) is a potentially accessible data connection (10, 12, 14, 16, 18).
5. Method according to anyone of the claims 1 to 4, further comprising the step of determining actually accessible data connections (10, 12, 14, 16, 18), and wherein said properties are obtained (100) during said determination.
6. Method according to anyone of the preceding claims, further comprising the step of determining active applications (50-56), and adapting (102) the configurations of said determined active applications (50-56).
7. Method according to anyone of the preceding claims, further comprising the step of starting (80) an application (50-56) on a mobile terminal device prior to obtaining (100) said properties.

8. Method according to anyone of the preceding claims, further comprising the step of detecting (90) a data transfer to be performed by an application (50-56), prior to obtaining (100) said properties.
9. Method according to anyone of the preceding claims, further comprising the step of selecting an appropriate data connection (10, 12, 14, 16, 18).
10. Software tool for adapting (102) the configuration of an application (50-56) of a mobile terminal to an accessible data connection (10, 12, 14, 16, 18), comprising program code means for carrying out the steps of anyone of claims 1 to 9 when said program is run on a mobile terminal device.
11. Computer program for adapting (102) the configuration of an application (50-56) of a mobile terminal to an accessible data connection (10, 12, 14, 16, 18), comprising program code means for carrying out the steps of anyone of claims 1 to 9 when said program is run on a mobile terminal device.
12. Computer program product comprising program code means stored on a computer readable medium for carrying out the method of anyone of claims 1 to 9 when said program product is run on a mobile terminal device.
13. Mobile terminal device comprising:
 - data exchanging means, capable of accessing at least one data connection (10, 12, 14, 16, 18);
 - data processing means, capable of running applications (50-56); and
 - means for obtaining properties of at least one data connection (10, 12, 14, 16, 18) accessible by said data exchanging means;characterized by
 - means for adapting (2, 40 44, 46, 48) the configuration of at least one application (50-56) according to said obtained properties.
14. Mobile terminal device according to claim 13, further comprising means for selecting one of said at least one accessible data connections (10, 12, 14, 16, 18).
15. Mobile terminal device according to claim 13 or 14, further comprising means for storing said configurations of said applications (50-56) for said at least one accessible data connection (10, 12, 14, 16, 18).

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M values, so that the first half of these frequencies is less than f and a second half of the same frequencies is greater than f ;

- (b) Injecting a PSK input signal at a frequency of $2f$ into the said power divider PDIV;
- 5 (c) Obtaining identical $i_1..i_M$ signals at the M outputs from the said power divider PDIV ;
- (d) Injecting the said signals $i_1..i_M$ into the respective inputs of dividers, $Div_1..Div$, and obtaining corresponding output signals, $O_1..O_M$, after a process of phase and frequency locking of the natural resonant frequency of each one of its
10 initial value f_i to value f , together with phase locking at an equilibrium value between the two possible values;
- (e) injecting the said output signals, $O_1..O_M$, taken two by two, at each of the respective M-1 power combiners, $PC_1..PC_{M-1}$, where they mix either additively or subtractively so that M-1 ASK modulation signals are produced, which respectively
15 respond to each of the possible M-1 changes in phase of the said PSK input signal.